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THE RELATIONSHIP OF THIRD-PARTY CERTIFICATION (TPC) TO SANITARY/ PHYTOSANITARY (SPS) MEASURES AND THE INTERNATIONAL AGRI-FOOD TRADE

CASE STUDY: GUATEMALA - WITH EMPHASIS ON FOOD SAFETY STANDARDS

RAISE SPS GLOBAL ANALYTICAL REPORT #3

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ACRONYMS

CB	Certifying Body
EPA	Environmental Protection Agency
FDA	Food and Drug Administration
GAP	Good Agricultural Practices
GMP	Good Manufacturing Practices
GOG	Government of Guatemala
HACCP	Hazard Analysis and Critical Control Points
ISO	International Organization for Standardization
LATU	Technological Laboratory of Uruguay
OGA	Guatemalan Office of Accreditation
PIPAA	Agricultural and Environmental Protection Program
SGS	Société Générale de Surveillance
SOP	Standard Operating Procedures
SPS	Sanitary and Phytosanitary
TPC	Third Party Certification
US	United States
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

This study was carried out with the following objectives in mind: 1) identifying and classifying the major third party certification (TPC) schemes and their accreditors currently performing third party food safety certification on fresh fruits and vegetables in Guatemala; 2) identifying the governance structures within TPC schemes; 3) defining the role of the government in the process of accrediting TPC bodies and 4) describing the impacts of TPC on farmers and exporters. Interviews were conducted with third party certifiers currently operating in Guatemala, exporters, farmers that deal with third party certification, industry consultants, and government stakeholders.

Most people interviewed during this study pointed out that TPC is an evolving trend with governance structures that change according to a given market. For instance, TPC of Guatemala exports to the US was found to be performed by private US certifying companies with their own set of policies agreed upon with the buyer. In the European market on the other hand, the EurepGAP standard is used as the governing set of rules. A third TPC scheme found in its incipient stage is the local supermarket TPC format, which is based on the inspection and certification policies created by a local public-private entity. It can be inferred that the three systems are in an evolving stage, as more farmers and exporters are being required to obtain certifications of compliance with safety assurance systems.

The study shows that stakeholders view food safety TPC as a necessity, since the vast majority of the produce exports leave Guatemala without any certification. Only few buyers have stringent food safety certification requirements that call for TPC. Farmers in particular believe that food safety certification is widely undervalued in the marke and that there is no price incentive for certified products. Consequently, voluntary adoption of TPC does not guarantee market access or buyer's preference continuously. Stakeholders also feel overburdened by having to simultaneously deal with more than one inspection or certification, especially when multiple markets, and multiple buyers within the same market, are being targeted.

Most stakeholders interviewed concur that the cost of TPC is the foremost concern for farmers and exporters, especially since certification visits are performed by international auditors working for the certifying entities. A significant cost-reducing factor has been the use of in-country affiliated auditors. An important element in the dynamics between the farmers, exporters, affiliated auditors, certifying entities, and the buyer is the role of the government in ensuring the capacity and quality of the services provided by affiliated auditors. This is a role that, according to stakeholders, has been played very passively and one that needs to be reformed to address the immediate market concerns of the Guatemala fresh produce industry.

At the end of this report, a set of conclusions and recommendations is presented to USAID. These guidelines are based on the information, concerns, and suggestions gathered from the interviewees. The objective of this report is to improve farmers' and exporters' ability to build a stronger, more reputable produce industry through high quality and affordable food safety third party certification.

1. INTRODUCTION

Third party certification (TPC) is defined as the verification of compliance with a given standard when such verification is not performed by a seller's self auditing (first party) or the buyer (second party). Third party certification is becoming ubiquitous for the Guatemalan fresh produce industry. According to the local experts, all actors, from fresh fruit and vegetable growers selling in regional and export markets to large food processors, have been exposed to some form of TPC in the last five to seven years. Such TPC aims to ensure the safety of food, comply with organic production criteria, or in the case of more complex standards, a combination of certification for safety, environmental and labor conditions.

Guatemalan food business stakeholders' high degree of familiarity with TPC can be explained by the following facts: (1) Guatemala has built an export culture since the mid-1970s and exports the widest variety of food items from the Central America Region, being second in food exports (with respect to both volume and value) to Costa Rica; (2) Guatemala has faced a number of food safety scares in the past 15 years from uncontrolled use of pesticides, as well as from food-borne pathogens in fresh and processed fruits and vegetables; (3) Guatemala's major export markets are the US and Europe, which has led to a dual compliance system, including TPC requirements ranging from the Food and Drug Administration (FDA) food safety guidelines and the Environmental Protection Agency (EPA) pesticide residue limits for the US to private supermarket consortia standards in the United Kingdom and the Euro-Retailer Produce Working Group Good Agricultural Practices (EurepGAP).

The standards required for a dual international market have been documented to some extent; however, an incipient movement by the local supermarket chains appears to be adding yet another line of requirements that is rapidly changing the local supply from rather weak public standards to higher safety and quality private standards (Reardon and Berdegue, 2002, Berdegue et al., 2003; Reardon et al 2003 and 2004; Hernandez et al 2004).

This report develops a characterization of the interplay between food safety certification standards and firms as well as with their corresponding accreditors, based on interviews with key stakeholders carried out in early January, 2005. The report explains their role in the development of the fresh fruit and vegetable industry and analyzes their effect on the performance of agricultural entrepreneur.In addition, the report describes the relationship between accreditation by the government and accreditation by outside entities based on the information gathered from the interviewees.1The report also touches on the discussion of the two major forces that have instigated the adoption of TPC. Finally, conclusions and recommended actions are put forth in order to effectively confront the challenges posed by the increasing demand for TPC in Guatemala.

[1] This report does not elaborate on organic certification in depth.

2. FOOD SAFETY STANDARDS, INSPECTION AND CERTIFICATION SCHEMES

Food safety standards are undoubtedly the most complex and best organized inspection and certification service provision structure in Guatemala. This existing capacity has been built over the last 15 years as the exporting industry groups evolved around food safety challenges imposed primarily by the US and European markets. Because of the well-developed export structure of the country to these markets, there are several standards followed. Thus, different actors provide inspection and certification services. According to Henson (2003), there may be a potentially valuable role for third party certification in cases where severe limitations in public sector capacity are present in developing countries. The particular characteristics of food safety TPC for different markets that require it are explained below.

2.1 TPC FOR EXPORTS TO THE US

Exports to the US comprise nearly 85% of all Guatemalan fresh produce exports (excluding the Central American market). The importance of the US market is due to the close geographic location and the growing demand for tropical products in the US (increased in part by a growing population of Latin American immigrants) (FMI, 2003). Guatemala's dependence on the US market provides an incentive for this industry to pay close attention to US regulations (FDA, USDA and EPA). For instance, after former President Clinton launched his Food Safety Initiative in 1997, Guatemalan exporters expected an increase in farm inspections by FDA. Skeptics interviewed thought it would have been impossible for a federal agency such as FDA to engage in an international farm inspection program. They were right in part, since targeted inspections have taken place in the last few years to address very specific cases where food safety problems have emerged. These included the case of raspberries from Guatemala from 1996 to 2001, mangoes from Brazil in 1998 and the recent case of green onions from Mexico at the end of 2003 (Calvin 2004, Sivapalasingam et al. 2003).

Few anticipated the emergence of market requirements for safety assurance, not as a product attribute to be shown to the consumer on the shelves[2], but rather as an "insurance policy" against purchasing from farmers without knowing the production and product handling conditions. This movement, although still considered incipient by some exporters interviewed, is gaining momentum, as wholesalers offer certification to their supermarket clients as part of their negotiations. It is important to note that there is no mandatory US safety standard being enforced (although the US government performs spot checks at ports of entry) and the local government does not enforce any local food safety standard. The local government has been actively formulating policy on good agricultural and manufacturing practices and facilitating training in some rural areas with high concentration of produce growers, but performing only a few targeted inspections with very low coverage. In other terms, food safety compliance is voluntary and in most cases companies perform self audits or are visited by their buyers to verify compliance with the minimum safety requirements (first and second party audits respectively). According to most interviewees only about five percent of all fresh produce exports to the US undergo some type of TPC. Berries, podded peas, and small amounts of crops such as mangoes and melons are among crops that are currently certified.

Several food safety certifiers provide their services in the US, although only a handful have been able to gain recognition internationally. This is due in part to their investment in marketing with supermarkets and wholesalers focusing on the benefits of counting on a certification system versus no certification at all. The main US market third party certifiers operating in Guatemala are Davis Fresh

[2] Food safety is generally not communicated to the consumer through labels on packaging.

(http://www.davisfreshtech.com), PrimusLabs (http://www.primuslabs.com) and the Agricultural and Environmental Protection Program (PIPAA). The first two entities are private companies, recognized by as many as 20 supermarket chains and wholesalers in the US. According to a currently affiliated certifier in Guatemala, this type of TPC relies on a cooperative process between the certifier, the buyer, and the farmer to protect their companies from food safety problems. The cost, however, is borne by the grower.

As it stands today, the process begins with a visit to identify critical control points coupled with a recommendation to farm managers regarding how to best mitigate identified food safety risks. This first stage marks the beginning of an educational process for farm managers including several training sessions on areas such as basic hygiene, pesticide application, pest control, hand-washing, facility maintenance and record keeping. Educating personnel is not an easy task for the auditor, as farmers are often illiterate. This has been a major challenge when certifying small production units that deliver their products to a central packing plant. However, with the creative design of record keeping notebooks and a process of self-auditing techniques instilled in the growers, the illiteracy barrier has been surmounted.

The inspection process is accompanied by a water microbial quality analysis, which is the most critical aspect of the audit. Even if a farm is in perfect compliance with all aspects regarding infrastructure, training, record keeping and hygiene practices, certification will not be granted if the water is contaminated with fecal coliforms. According to the audit checklist, there are (a) critical, (b) essential and (c) not very essential aspects evaluated during the audit. Not having the required quality of water poses major challenges for small growers without access to microbiologically-fit water, or without the capital to invest in corrective measures. However, some relief is provided for many small growers by the fact that not all water sources need expensive, corrective measures. Most of the time protecting the source from wildlife or open access has resulted in a big decline in the coliform count. Microbial water analysis is priced at approximately $10.00 per test, which essentially makes water quality monitoring a monthly practice for farms with a well established food safety assurance system. According to the affiliated auditor of Davis Fresh, contaminated water is the number one reason that small and medium farmers fail to pass the audits.

Pesticide analyses are not part of the audit process, as their cost runs about $180.00-$250.00 per test. Besides, there is a general discussion around the validity of pesticide analysis as a compliance indicator with the pesticide residue limits established by EPA. In general, samples taken to the laboratory will seldom identify the problem in the field, and by the time the results are delivered, the merchandise is already on its way to the market. A thorough training and audit process is preferred by certifiers as a mitigation measure against pesticide application abuse.

To ensure uniformity and consistency with the risk mitigation procedures, base documents are developed for most of the farm activities, identifying the critical control points and documenting the actions following GAP, GMP and HACCP guidelines. At this point in the process, the certifier provides the knowledge to develop this documentation tailor-made to the crop or process under certification.

Once the risk assessment has taken place and the personnel have been trained, the second stage is to apply the mitigation measures. At this stage, the farmer must demonstrate that all concerns have been addressed. The certifier witnesses the process and evaluates the changes incorporated in infrastructure, equipment, and farm surroundings, and then weighs the evaluation on three major aspects: water microbial quality, personnel hygiene, and pesticide usage.

Interviewees noted that, in the case of Davis Fresh, a date is set for the certification visit, and the certifier will give a verdict on the degree of compliance of the farm for that date. A minimum of 85 out of 100 points must be scored in order to pass to the third phase, which is the certification itself.

The certification of the facilities is valid for one year, after which the farmer can renew as needed based on the demands of the buyer.

It is important to mention that suppliers to the US market face dual standards within the market and presently most of them do not require certification at all. An example of this situation is the case of Aj Ticonel, a small farmer association with nearly 2000 associates of whom over 700 are producing at any given time of the year. Aj Ticonel sells its produce to wholesalers that distribute to large food service companies such as Sysco, well known for performing second party certification of GAP and GMP compliance at the fields and packing plants of their wholesalers' suppliers prior to beginning shipments. Parallel to the business with Sysco, Aj Ticonel supplies fresh produce to large companies such as Wal-Mart through some specialized wholesalers without third- or second party certification. Due to the complexity of dealing with multiple standards, Aj Ticonel has to regularly enlist the services of Davis Fresh as a third party certifier in order to show the certification as a marketing advantage on a voluntary basis in a buyers' market that is slowly growing more aware of the need for food safety assurance systems.

The third entity that performs TPC for the US market is PIPAA, a public-private entity originally created to provide food safety inspection services to specific export sectors that had phytosanitary or sanitary problems identified by USDA or FDA. In the case of their Safety Certification System (http://www.pipaa.com), it is based largely on the FDA Guide to Minimize Microbial Hazards for Fruits and Vegetables, a part of the US Food Safety Initiative published in 1998 (see http://www.cfsan.fda.gov/~dms/prodguid.html). Since its founding in 1991, PIPAA's main technical mentor has been the FDA, while working on cases such as excess of pesticide use in snow peas, and most recently on food safety concerns regarding berries (Calvin et al., 2003). However, in the late 1990's, European cooperation to improve Guatemala's competitiveness programs influenced PIPAA's creation of a TPC system under the umbrella of the International Organization for Standardization's (ISO) rules for third party certifiers. According to ISO, a certifying body cannot also provide the technical assistance and training to meet the standard, but based on how the US market sees it, it is acceptable for a third party (independent certifiers including the FDA) to perform everything from identifying problems, providing training, and helping to correct them so as to gain the certification. PIPAA's plan is to be a certifying entity only. In order for that to happen, a broad base of qualified trainers must exist in the country to provide the extension and education programs necessary for farmers to meet the standards. An intense training program for professionals to replace PIPAA's direct involvement in the training is currently in its fifth year;however, total separation has not been possible to date.

In summary, these certifiers' approach is threefold: (1) risk assessment; (2) risk mitigation; and (3) certification. The advantages of this system are as follows: (1) In the absence of effective government extension services, this process involves cooperation with farmers and helps them build capacity, while at the same time assisting them in complying with the standard. (2) Compliance with the standard relies on a self-policing system instilled by the buyer and certifier reminding the supplier of the important of risk mitigation. (3) The certification is only verified through announced visits once a year, with the exception of PIPAA, which inspects once a month in unannounced visits. For international certifiers, the low frequency of inspection makes the cost of the certification more affordable as they claim to certify the facilities and the processes. The audits or certification visits can vary from $450.00 to $700.00 per packing shed, main production field, or secondary field. This expense does not include the travel cost, which is charged at $50.00/hour or $400/day plus other minor costs to pay for mileage, and express courier of audit reports to the buyers. PIPAA's costs are much lower because the salaries of their personnel are partially funded by the public and private sector. PIPAA claims that the product itself has complied with the standard; hence the need for monthly visits. Interviewees note that, although it lacks the market recognition Davis Fresh and Primus labs have attained, the PIPAA certification is more affordable.

Important criticisms were gathered on the TPC services performed by international entities. For instance, (1) having a cooperative relationship with the certifier often creates a conflict of interest, as a certifying authority; (2) commercial farming operations have high personnel turnover, which means that by the time the next certification visit takes place a year later, a high percentage of the personnel working at the farm are not those who were audited during the initial certification. (3) Finally, due to the low frequency of inspection, and the fact that inspections are announced, farmers may be able to easily thwart the system requirements.

2.2 TPC FOR EXPORTS TO EUROPE

Guatemala fresh fruit and vegetable exports to Europe account for approximately 10-12% of the overall exports, excluding the Central American market. The main European market safety standard subject to TPC is EurepGAP (http://www.eurep.org). EurepGAP is the most important standard for the European market, as it is endorsed and is gradually being required by over 25 supermarket chains in Europe and South Africa. Under these criteria, the European retailers affiliated with EurepGAP can demonstrate compliance to Good Agricultural Practices under a unified set of requirements. Guatemalan exporters understand that the European approach to standards is broader in scope than the US buyers' required standards. While US supermarkets emphasize the fulfillment of the minimum requirements to minimize microbial hazards through GAPs and observe the maximum pesticide residue limits according to EPA, EurepGAP standards have a three-pronged agenda (a) food safety, (b) sustainable production practices for flora, fauna, and natural resources and (c) workers' welfare.

Unlike the certification system used by Davis Fresh or PrimusLabs for the US market, where each certifying entity develops their own standard operating procedures (SOPs), EurepGAP certification follows internationally-recognized certification criteria such as the ISO Guide 65.[3] There is also a EurepGAP secretariat, which ensures that accreditation is given only through their responsible Accreditation Body. The system is designed to protect its integrity by ensuring that all certified growers have met the same requirements for certification.

There is no certifying body (CB) to perform EurepGAP audits in Guatemala. The process to become accredited as a certifying entity is, according to most interviewees, cumbersome and there needs to be an economic incentive to engage in the CB recognition process in order to justify expenses. Such an incentive does not currently exist, as only a few exporting companies would actually use the service. In turn, companies that need to be EurepGAP-certified immediately work with certification bodies in nearby countries (Costa Rica or Mexico) such as LATU Laboratories, with offices in Costa Rica and Mexico, and headquarters in Uruguay (http://www.latu.org.uy).

Before contacting a certifying body, companies in the process of acquiring EurepGAP certification search for local experts to conduct a pre-inspection so that they are at a higher level of compliance when the accredited certifier visits them. This has created a local demand for well-trained personnel on EurepGAP standards. These trainers do not need to be affiliated with any accredited certification body. This enables the companies to save on overall certification costs by hiring local consultants and avoiding high travel charges incurred from repeated visits by international experts.

It was surprising that interviewees did not criticize this standard or outline advantages or disadvantages in the system. From their vantage point, EurepGAP is viewed as a requirement, and the sooner they implement it, the better off they will be. Some of them expressed a desire to focus on obtaining the certification rather than knowing the details of how the system operated. At present,

[3] This information has been retrieved directly from the EurepGAP website.

only four Guatemalan companies are certified with EurepGAP, although at least 10 other companies claim to be in the process of obtaining certification.

In summary, EurepGAP differs from the TPC for the US market in that (1) it is a highly structured inspection system governed by a central office where certification procedures follow an international standard (ISO Guide 65/EN 45011), and (2) EurepGAP requires that the certifier only certify, unlike the US certifiers who assess risk, recommend changes, and then certify. The latter is a challenge to growers from a cost perspective, as they have to hire both local, qualified professionals to meet the standard, as well as international, accredited professional services to certify it.

None of the interviewees knew how much of the exports to Europe were already complying with the EurepGAP standards, but the general calculation was only about 10%. This percentage is expected to triple in the next twelve months as the demand for the standard increases. It is important to note that some second party certification is still common, especially from UK supermarket buyers.

2.3 TPC FOR THE LOCAL AND CENTRAL AMERICAN MARKET

High-quality fresh fruit and vegetables produced under safety assurance programs for the local market were not available until about five years ago. The vast majority of wet and municipal markets were the only places where fresh produce could be purchased. Despite the recent strong growth of the supermarket sector, over 90% of the fresh fruits and vegetables consumed locally are still being purchased at open-air type markets. Nevertheless, this situation appears to be changing with the recent rise of supermarkets. These supermarkets often follow the trend of providing higher quality, and safety attributes to their most demanding consumers. The information gathered in this study reveals that the leading supermarket chain in Guatemala is at least starting to rely on TPC to ensure that suppliers are complying with the general guidelines for food safety.

The main local-market TPC entities in Guatemala are (1) the Agricultural and Environmental Protection Program (PIPAA); (2) private laboratories; and (3) individual consultants. The personnel in charge of field inspection and laboratory analyses have been trained mostly on FDA food safety risk control guidelines rather than on European regulations. Consultants and laboratory experts assist the industry in developing HACCP plans, designing standard operating procedures for their farms and packing plants, and performing announced visits to assess the level of application of safety measures. It is a common practice for some suppliers to hire a consultant, which essentially represents a type of first party certification. In one particular instance, a laboratory was found to be integrated into the largest supermarket chain's distribution center, which in this case, can be categorized as second party certification. None of these entities or consultants—with the exception of PIPAA—has developed a safety standard for fruits and vegetables with a quality manual to consolidate a comprehensive third party inspection and certification service. At present, PIPAA's food safety certification program is the standard followed by the leading supermarket chain in Guatemala, La Fragua. For reasons that were not determined, La Fragua does not widely enforce the PIPAA TPC system, but is currently in the process of establishing stringent food safety assurance measures. La Fragua's produce market share is roughly 9% of the overall fresh fruit and vegetable market in Guatemala (Reardon et al., 2003).

Whether this certification will be required of all La Fragua fresh produce suppliers has not yet been determined. At time of this study, PIPAA's certification remained optional for La Fragua suppliers, except for lettuce, strawberry and pepper growers, for whom tighter compliance schedules have been established by La Fragua (Flores 2004).

PIPAA is a non-profit organization supported in part by the Guatemala Ministry of Agriculture. This represents a major advantage to small growers who want to upgrade their safety assurance programs for any market (US, Europe or local) prior to their certification audit. It was very difficult to

determine the exact percentage of the total supermarket purchases of fresh fruits and vegetables being certified by a third party. Depending on the number and size of companies, and the volume of crops (e.g. tomatoes, lettuce), it could be approximately 5-7%.

3. THE ROLE OF THE GOVERNMENT WITH RESPECT TO TPC

For the Government of Guatemala's (GOG) Ministry of Economy, "accreditation" is a buzzword in the efforts to help local industries attain a high level of competitiveness. According to the chief of the Guatemalan Office of Accreditation (OGA), accreditation is a trade promotion tool that, when accurately conducted, possesses many advantages. The aim of OGA is to ensure that the industry counts with (1) consistent laboratory services; (2) uniform results; (3) accurate results; and (4) promoting international recognition for the services provided by domestic companies. As confirmed during the interviews, these four objectives emphasize specific laboratory processes. However, OGA is also in the process of accrediting certifying organizations, quality management systems (ISO Guide/IEC 62), environmental management systems (ISO Guide/IEC 66), products (ISO GUIDE/IEC 65), and inspection bodies (ISO 17020).

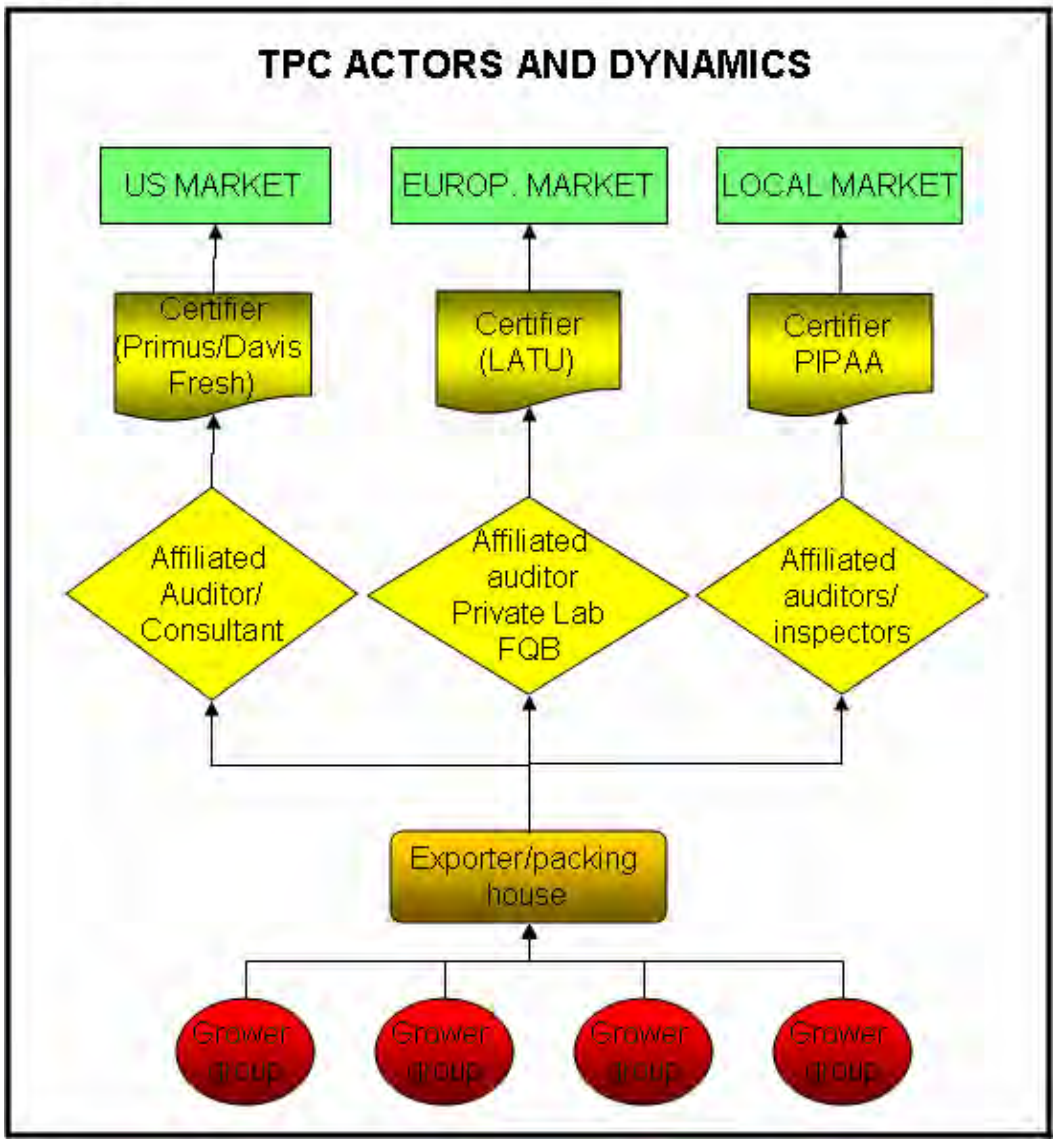
Under these areas of accreditation, only one organic certification agency (Mayacert) has been accredited by OGA. According to one interviewee, the Government has been slow to provide accreditation. Moreover, there is a lack of demand for accreditation on by the industry in part due to the fact that third party certifiers for the US market are not affected by government regulations, and do not abide by accreditation procedures as described by ISO. Even EurepGAP certifiers, which do follow ISO guides, do not necessarily have to be accredited by the governments in exporting countries.

According to some consultants and private laboratories, the role of the government needs to be reformed in order to directly address the demand of market dynamics. For instance, most private laboratories that supply inspection and certification services should be affiliated with a company like LATU, PrimusLabs, Davis Fresh or another company with a recognized name in the buying world instead of struggling to survive under their own company names in a very small market. This was confirmed by one local quality manager, who works as the affiliated certifier for Davis Fresh in Guatemala under the safety seal "Pro-Safe Certified." Her firm realized that its lack of marketing power to deal directly with supermarkets and large wholesalers in the US is the main obstacle to expanding the business under the company name. Companies like PrimusLabs, SGS, LATU, and others are encouraging the use of affiliated certifiers in-country in order to make their fees more accessible to small companies. Some certification costs are still prohibitive for small exporting companies, but special programs for small growers can be implemented through associations and cost sharing.

The problem with the system described above, as some consultants point out, is the absence of an authority that can ensure that all affiliated auditors have the minimum training to perform such activities. This problem can be better illustrated with an example given by an interviewee about an auditor who was not properly trained. The auditor in the example certified a farm to export to the US. The same farm was also going to be certified at a later date by an auditor for the European market. The latter had serious concerns about the infrastructure and management of the farm and did not certify the farm to export to Europe. This created confusion for the farm owner, who was unsure whom to trust since he was approved to sell to the US buyers under the same farm operating conditions. A discrepancy in criteria between the two auditors on significant element such as infrastructure implies a high degree of subjectivity in the audit process across standards. Yet, a greater concern is that there is no government control to decide who is technically capable of performing such services for interested companies, which ultimately precludes mistakes in judgment from being detected and corrected. When the problems are unveiled, the farmer begins to lose trust in the system believing that anyone can perform an audit without necessarily having the appropriate scientific and technical background.

Some consultants interviewed that were interviewed firmly believe that, with a good inspection and accreditation system supervised by the government through the right accreditation mechanism, these flaws can be avoided, ultimately making the industry more competitive and the process more transparent. This is important because local auditors are increasingly becoming the link between standards takers (exporters/packing houses/growers) as shown in Figure 1 and the certifiers (accredited or not, depending on the market). Local auditors add value to the TPC system significantly by eliminating the costs of bringing in international inspectors. Moreover, such auditors allow the system to be adapted to small growers by doing group audits and sharing the costs of the overall certification, as previously explained.

Figure 1



One interviewee with over 15 years of experience in the field described the role of the government as being central in increasing the quantity and improving the quality of the local auditors, so that more companies can access dynamic, better paying markets while building a strong, competitive force at the production and processing level.

With respect to the role of the government regarding TPC, the European approach to TPC has been more influential than American method in the conceptualization of certification and accreditation processes. Given that the US is the most important trade partner for Guatemala, this fact could be considered paradoxical. Yet, it is easily explained by the fact that FDA, unlike the European health authorities, does not delegate the role of ensuring the safety of produce to private third parties. Recently, however, USAID has been supporting the strengthening of the adoption of food safety standards at the field level in order to help small and medium growers understand the need for adopting safety assurance programs for two major purposes: (1) to avoid food safety problems that could result in a total halt to exports to the US; and (2) to face the challenges of private safety standards imposed by supermarkets abroad, including EurepGAP and the Central American market.

4. THE DECISION MAKING PROCESS TO OPT FOR TPC

According to interviewees there are two main forces behind the adoption of TPC in Guatemala. Growers will opt for TPC when (1) it is required by the customer and (2) it is a company policy in preparation for entering a market. In either case, growers and exporters in Guatemala are concerned about three major issues: 1) the cost of the certification; (2) the flexibility of the standard in accepting the minimum compliance conditions; (3) and the burden of dealing with more than one standard when there are different clients (e.g., companies that sell to the US and Europe, and also to the local supermarkets).

As a result of several years of exposure to TPC, the exporting sector seems to understand the necessary steps to take when faced with buyers who demand TPC. The same cannot be said about the local supermarket suppliers for a number of reasons. First, many locally consumed products such as tomatoes, onions, or lettuce, are produced by farmers who have not participated in the exporting process; hence, food safety TPC is a fairly new topic for them. Second, the scale of investment for the majority of local small-scale supermarket suppliers is low. Thus, farmers are often slow to implement corrections recommended by the inspectors/certifiers, or choose the minimum-cost, haphazard 'solution' to a safety compliance issue. Third, small growers are sometimes confused by the signals from the supermarkets, as strong enforcement of safety standards has not always been required in order to gain access to supermarkets . In reality, the price of the product still plays a major role despite the certification, and those who can afford to negotiate at lower prices increase their likelihood of sales. Fourth, the establishment of TPC as a requirement for local supermarket suppliers is still at a very incipient stage, led mainly by visionary, better-off farmers who have opted for safety certification voluntarily as a marketing tool to access supermarkets and fast-food chains or simply to gain more prestige for their well-positioned brands such as La Carreta, Maxim and Royal Antigua which are popular in supermarkets.

Suppliers tend to associate the application of safety standards with higher prices, which has not been the case. One of the farmer group leaders interviewed explained that his company does not receive a price premium on products that are safety-certified as they would for products that are certified organic. This lack of price incentive is evident among most products, yet the farmer must bear the cost of certifying farms (financial investment in infrastructure changes, increased payroll for sanitation, record keeping, and other safety certification-related expenses). A concern for most stakeholders—on the auditing side—is that very few TPC users value the benefits of food safety standard compliance as a means to increase the general health of workers and consumers. They fear that as soon as they switch to other less strict buyers, farmers will lower the bar on the application of important measures, such as hand-washing and other sanitation requirements.

5. CONCLUSIONS AND RECOMMENDED ACTIONS

Over the last 5 years, TPC has become increasingly more important in the US, European, Central American markets. Although the degree of penetration of TPC is still low in terms of the volume of produce being certified, it is a strong trend that threatens to exclude small and medium scale entrepreneurs from market opportunities in their own backyard. Based on the information provided in this document, three major conclusions can be drawn regarding TPC for food safety in Guatemala:

(1) Each market is a world of its own regarding food safety standards and TPC requirements, and treating them separately makes the process complicated for farmers, buyers and certifying entities. Both the US and European markets seem very strong in their position with respect to how food safety assurance should be certified, and the local standard is still too weak to define its own set of policies. With respect to this situation, USAID should continue increasing awareness among farmers about the differences between such standards and consolidate a strong base of knowledge at the farmer level regarding the critical aspects of all TPC standards, such as water quality, worker and facility sanitation.

(2) Food safety TPC requirements today are viewed by farmers as a mere an option rather than a requirement, as the vast majority of the produce buyers in the US, Europe and Guatemala are not imposing such practices in general. Farmers still have the option to sell to other less strict buyers, and it seems that this situation will remain the same for several years. This way of thinking has been encouraged by numerous messages from EurepGAP defining a final date for compliance, which has been delayed on more than one occasion. This thinking is also supported by the buying behavior of US and local buyers and exporters, which undermines the importance of food safety over pricing even when a number of farmers have already invested in improving their facilities and training their personnel. In short, those complying with a food safety standard through TPC are selling under the same conditions as those who have not invested in improving and adopting stricter safety assurance standards. Hence, USAID should help farmers to understand this reality. No party should continue scaring farmers by announcing a sudden shift in the trends as has been done over the last seven years in Guatemala, but rather TPC should consider the health of the consumer first and then focus on gaining a market advantage.

(3) Farmers understand that opting for food safety TPC in Guatemala is affected by the cost, flexibility and burden of dealing with multiple standards even within the same market. In this regard, it was explained that the role of local professionals is to lower the cost, substitute for inadequate public and private extension systems, and customizing the training according to the market of interest. Therefore, USAID should promote projects and policies that favor cost sharing systems among small growers. Farmers who operate under a food safety certification system not only increase their ability to access dynamic, better-paying markets, but also build on the capacity to consolidate a more competitive, reputable industry for the country. Similarly, USAID should support the Ministry of Economy's competitiveness programs in order to assist them in including oversight of the entities supporting food safety TPC compliance for the US market. This is particularly important given that the focus of the competitiveness programs is more influenced by European approaches, although Guatemala's major market is the US. A major element of such assistance should be an emphasis on improving the quality of professional services that link farmers with the actual third party certifying entities. It is important to note that USAID already has a program aimed at improving the farmers' response capacity to food safety certification needs for the US, European, and Central American markets. Consequently, their experience should be evaluated before recommending similar actions in other countries.

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